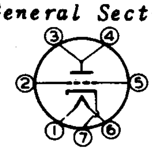
6F4

6F4
OSCILLATOR TRIODE
ACORN TYPE

For use at frequencies up to 1200 Mc approx.

Heater	Coated Unipotential Cathode		
Voltage	6.3	a-c or d-c	volts
Current	0.225		amp.
Direct Interelectrode Capacitances:○			
Grid to Plate	1.9		μμf
Grid to Cathode & Heater	2.0		μμf
Plate to Cathode & Heater	0.6		μμf
Overall Length			1-7/32" ± 5/32"
Overall Diameter (including radial pins)			1-3/32" ± 1/16"
Bulb	*See Outline in General Section*		T-4½
Base	*See Outline in General Section*		Small Radial 7-Pin

Pin 1 - Heater
Pin 2 - Grid
Pin 3 - Plate
Pin 4 - Plate



Pin 5 - Grid
Pin 6 - Heater
Pin 7 - Cathode

Mounting Position ... Any

BOTTOM VIEW (7BR)

Maximum Ratings Are Design-Center Values

A-F AMPLIFIER

Plate Voltage	150 max.	volts
Plate Supply Voltage	300 max.	volts
Plate Current	15 max.	ma.
Plate Dissipation	2 max.	watts
D-C Heater-Cathode Potential	80 max.	volts
Characteristics - Class A_1 Amplifier:		
Plate Voltage	80	volts
Cathode-Bias Resistor□	150	ohms
Amplification Factor	17	
Plate Resistance	2900	ohms
Transconductance	5800	μmhos
Plate Current	13	ma.

R-F POWER AMPLIFIER & OSCILLATOR - Class C Telegraphy

D-C Plate Voltage	150 max.	volts
D-C Plate Supply Voltage	300 max.	volts
D-C Grid Voltage	-50 max.	volts
D-C Plate Current	20 max.	ma.
D-C Grid Current	8 max.	ma.
Plate Dissipation	2 max.	watts
D-C Heater-Cathode Potential	80 max.	volts
Typical Operation at Moderate Frequencies:●		
D-C Plate Voltage	150	volts
D-C Grid Voltage♦	-15	volts
	550	ohms
	2000	ohms
D-C Plate Current	20	ma.
D-C Grid Current (Approx.)⊙	7.5	ma.
Driving Power (Approx.)⊙	0.2	watt
Power Output (Approx.)	1.8	watts

○, □, ●, ♦, ⊙: See next page.

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6F4

OSCILLATOR TRIODE

(continued from preceding page)

○ With no external shield.

□ Fixed-bias operation is not recommended. Under maximum rated conditions, the d-c resistance in the grid circuit should not exceed 0.5 megohm.

● Approximately 45 milliwatts can be obtained when the 6F4 is used at 1200 megacycles as an oscillator with 100 volts on plate, maximum rated plate dissipation, and grid resistor of 2000 ohms.

⧫ Obtained from fixed supply, or by cathode resistor (550), grid resistor (2000), or partial self-bias methods.

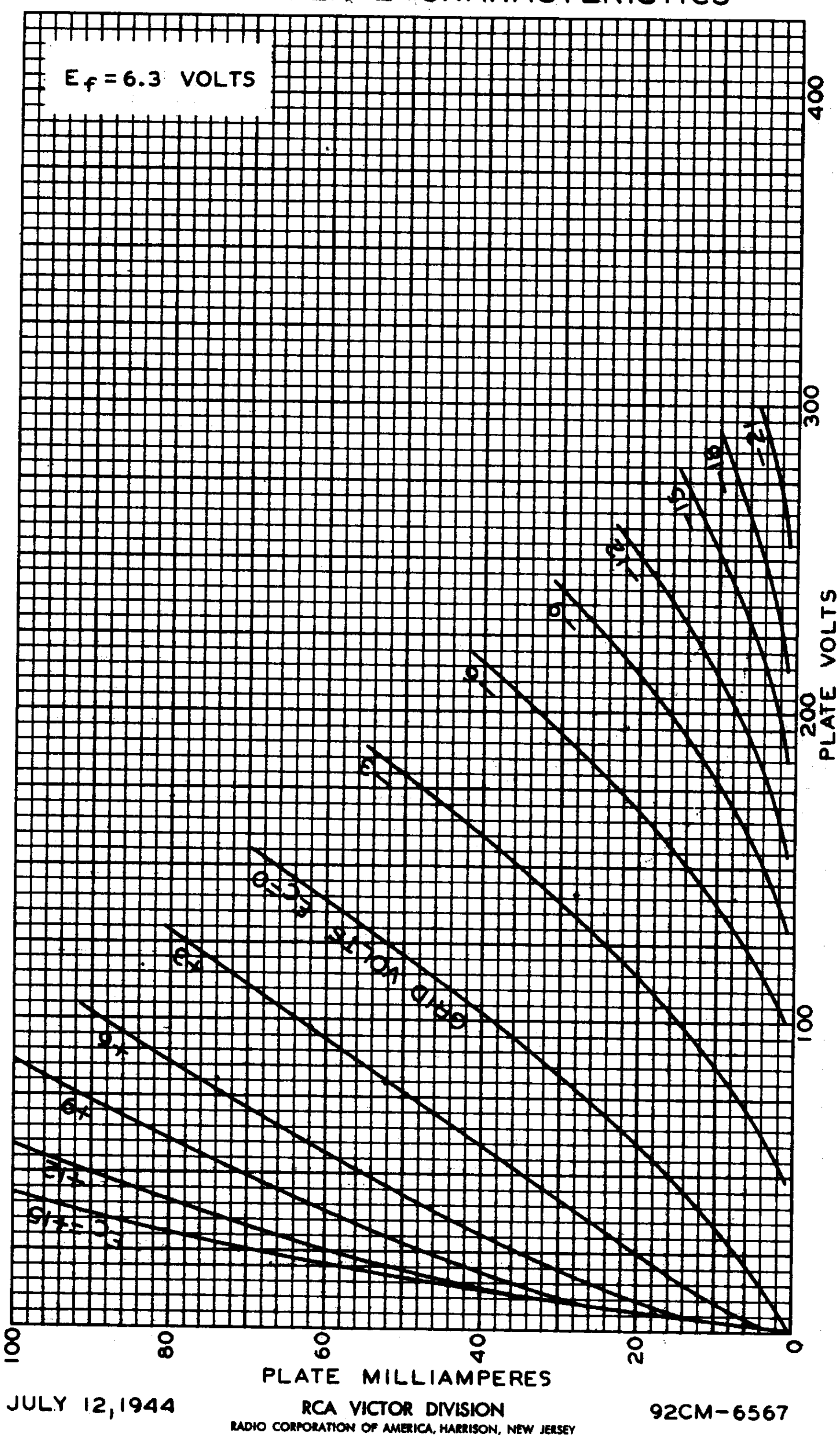
⊙ Subject to wide variations as explained under TUBE RATINGS in General Section.

The *socket* for the 6F4 should be electrically and mechanically compact, and be made with an insulating material having a loss factor not exceeding 0.035 to permit operation of the 6F4 at high frequencies. For most satisfactory performance of the 6F4, it is essential that the inductance of connections between tube and circuit be kept as low as possible.

6F4

6F4

AVERAGE PLATE CHARACTERISTICS



JULY 12, 1944

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92CM-6567

6F4

6F4

TYPICAL CHARACTERISTICS

